

Work Order ID 134405

Wednesday, July 08, 2015 3:13:02 PM

134405

Page 1

Item ID: D412-775-015 Accept *N900040100* Setup Start *NS1*

Revision ID: Stop *NS2*

Item Name: Fuel Panel Protective Trim

Start Date: 7/03/15 Start Qty: 2.00 *2* Cust Item ID:

Required Date: 7/07/15 Req'd Qty: 2.00 *2* Customer:

Reference:

Approvals: Process Plan: MLJ Date: JUL 09 2015 Tooling: _____ Date: _____

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start *NR1*

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
IIN D412-775	A								MLJ DEC 03 2015
100	Document Control	0.00							
100	DOCUMENT CONTROL								
DC	Memo	0.00							
Doc.Control -USB or Paperwork	Photocopy bluefile & type labels per PPP D412-775-015 CHG003								
105	Pick Kit	0.00							
105									
Packaging	Memo	0.00							
Packaging									
110	QC4- 100% Inspect kits for completeness	0.00							
110									
QC	Memo	0.00							
Quality Control									

MLJ DEC 03 2015

2X DAS 28 9-89 DEC 03 2015

2X DAS 6 9-89 DEC 02 2015 DAS 27 9-89

2X DAS 28 9-89 DEC 03 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation			Disposition		
			Completed By		
			Lead hand / Supervisor Approval Verification		
			QC / QA Coordinator Approval		
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : _____					

Work Order ID 134405

134405

Page 2

Wednesday, July 08, 2015 3:13:02 PM

Item ID: D412-775-015 Accept *N900040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Fuel Panel Protective Trim
 Start Date: 7/03/15 Start Qty: 2.00 *2* Cust Item ID:
 Required Date: 7/07/15 Req'd Qty: 2.00 *2* Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120		0.00							
120	Packaging					2X		DAS 28 9-89	DEC 03 2015
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPP D412-775-015 Location : FG028								
130	QC21- Final Inspection - Work Order Release	0.00							
130									
QC	Memo	0.00							
Quality Control									

20151203
 SH

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

Picklist Print

Wednesday, July 08, 2015 3:13:01 PM

Page 1

Work Order ID: 134405

134405

Parent Item: D412-775-015

D412-775-015

Parent Item Name: Fuel Panel Protective Trim

Start Date: 7/03/15

Required Date: 7/07/15

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP Rev:A 08-12-10 new issue DD verified by:ec IPP REV:B
10.04.22 add seq 105 DD verified by:EC IPP REV:C 11.05.05
chg002 per ecn 11-562 DD verf:EC IPP REV:D 11.10.05 chg003 per
ecn 11-646 DD verf:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3609-1		Manufactured	No			105	Each	24.0000	1	2			

D3609-1

Doubler

Location

Loc Qty

Loc Code

ST228B

24

116579

4

132166

20

DAS
28
9-89

DAS
6
9-89

DAS
27
9-89

DEC 02 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																																																										
Description Work Order Deviation				Disposition				Completed By																																																									
								Lead hand / Supervisor Approval Verification																																																									
								QC / QA Coordinator Approval																																																									
Root Cause		FAULT CATEGORY																																																															
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____			
Misidentified ☐	Past Due ☐																																																																

Work Order ID 134405

Wednesday, July 08, 2015 3:13:02 PM

134405

Page 1

Item ID: D412-775-015 Accept *N900040100* Setup Start *NS1*

Revision ID: Stop *NS2*

Item Name: Fuel Panel Protective Trim

Start Date: 7/03/15 Start Qty: 2.00 *2* Cust Item ID:

Required Date: 7/07/15 Req'd Qty: 2.00 *2* Customer:

Reference:

Approvals: Process Plan: MLJ Date: JUL 08 2015 Tooling: _____ Date: _____ Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
IIN D412-775	A								
100	Document Control	0.00							
100	DOCUMENT CONTROL								
DC	Memo	0.00							
Doc.Control -USB or Paperwork	Photocopy bluefile & type labels per PPP D412-775-015 CHG003								
105	Pick Kit	0.00							
105									
Packaging	Memo	0.00							
Packaging									
	QC4- 100% Inspect kits for completeness	0.00							
10									
Quality Control	Memo	0.00							

MLJ DEC 03 2015
2

REFERENCE ONLY

DART AEROSPACE LTD.

ICA-D412-775

ICA Page 31 (32 blank) of 32

DAS
28
9-89

53.7 WEIGHT AND BALANCE

INSTALLATION	Weight	LATERAL		LONGITUDINAL	
		Arm	Moment	Arm	Moment
D412-775-011	1.20 lb	0 in	0 in lb	45.5 in	54.3 in lb
Door Sill Protective Trim Kit	0.54 kg	0 m	0 m kg	1.16 m	0.63 m kg
D412-775-013	1.25 lb	+44.8 in	+56.0 in lb	69.0 in	86.25 in lb
Step Protective Trim Kit	0.57 kg	+1.14 m	+0.65 m kg	1.75 m	1.00 m kg
D412-775-015	1.39 lb	+41.5 in	+57.7 in lb	172 in	239.1 in lb
Fuel Panel Protective Trim Kit	0.63 kg	+1.05 m	+0.66 m kg	4.37 m	2.75 m kg

53.8 PARTS LIST

Qty -011	Qty -013	Qty -015	Part Number	Description
X			D412-775-011	DOOR SILL PROTECTIVE TRIM KIT
	X		D412-775-013	STEP PROTECTIVE TRIM KIT
		X	D412-775-015	FUEL PANEL PROTECTIVE TRIM KIT
2			D3602-1	ANGLE
	1		D3608-1	LOWER DOUBLER
	1		D3608-3	UPPER DOUBLER
		1	D3609-1	DOUBLER

• COPYRIGHT © 2008 BY DART AEROSPACE LTD. •
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED
OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

53-00-00

Revision: 0

Page 15 (16 blank) of 16